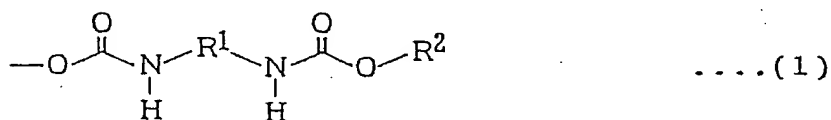


REMARKS

Claims 1, 4, 5 and 8-12 have been rejected under 35 USC 103(a) as being unpatentable over Sunamoto et al in view of Ishiwatari et al. Applicants respectfully traverse this ground of rejection and urge reconsideration in light of the following comments.

As stated previously, the instant invention is directed to a cosmetic product comprising 99.99 to 50 wt.% of cosmetic components, a solvent containing at least one of a volatile oil and a volatile organic solvent and 0.001 to 50 wt.% of a pullulan-cholesterol derivative formed by substituting the hydroxyl groups of monosaccharide units constituting the pullulan of the pullulan-cholesterol derivative, in a proportion of 0.01 to 20 groups per 100 monosaccharide units, by a radical represented by Formula (1),



in which R<sup>1</sup> is a hydrocarbon group containing 1-10 carbon atoms and R<sup>2</sup> is a cholesteryl group.

The cosmetic product of the present invention is especially useful in the treatment of skin or hair conditions caused by drying, such as rough skin and defective luster, and provides moisturization of the skin and hair by retaining sufficient moisture therein while giving the skin and hair a superior touch and feel due to the inventive cosmetic product having a high moisture-retaining ability, lamella formation facilitation, high film-formability and superior stabilization. It is respectfully submitted that the presently claimed invention is not disclosed by the prior art.

Sunamoto et al is cited as the primary reference by the Examiner and discloses polysaccharide-sterol derivatives which can be utilized as polysaccharide coatings for liposomes,

coatings for lipid emulsions and as polymeric surfactants used in the preparation of polysaccharide coating emulsions. Pullulan is disclosed as being suitable for use in the polysaccharide-steroid derivatives disclosed in Sunamoto et al and cholesterol is disclosed as being suitable for use as the sterol. However, as admitted by the Examiner, this reference has no disclosure of a solvent containing at least one of a volatile oil and a volatile organic solvent. As such, the secondary reference cited by the Examiner must provide the motivation to one of ordinary skill in the art to incorporate at least one of a volatile oil and a volatile organic solvent into the composition of Sunamoto et al. It is respectfully submitted that the secondary reference cited by the Examiner contains no such disclosure.

The Ishiwatari et al reference discloses an oil-and-water emulsified composition and an oil-in-water emulsifying agent. The composition comprises an  $\alpha$ -monoalkyl glyceryl ether, a wax and a silicone oil. This reference further discloses that an oil-in-water emulsified composition can be obtained having better long-term stability by containing a water-soluble high polymer and specified polysaccharides are disclosed as being suitable as a natural high polymer. However, there is no suggestion contained in this reference which would motivate one of ordinary skill in the art to incorporate the silicone oil disclosed in Ishiwatari et al into the composition of Sunamoto et al or combine the composition of Sunamoto et al with the oil-in-water emulsifier composition disclosed in Ishiwatari et al.

The Examiner states in the Office Action that it would have been obvious to use the pullulan-steryl compositions of Sunamoto et al in the cosmetic oil-in-water emulsions of Ishiwatari et al as pullulan-steryl compositions have previously been used in the formation of emulsions and liposomes. Applicants respectfully request that the Examiner provide specific support for this statement. In the statement of "Prior Art" in Sunamoto et al, it is disclosed that

polysaccharide-cholesterol derivatives have been used as coatings for liposomes, coatings for lipid emulsions and as surfactants in the preparation of coating emulsions. There is no disclosure in this reference that the polysaccharide-cholesterol derivatives have been used in the formation of water-in-oil emulsions for liposomes. As such, unless the Examiner provides specific support for this statement, Applicants respectfully traverse the position of the Examiner.

Although the Examiner has not made a proper showing of prima facie obviousness under 35 USC 103(a) of the currently claimed invention, Applicants respectfully submit that objective test data is of record in the present application which is more than sufficient to rebut any proper rejection of prima facie obviousness under 35 USC 103(a).

The present invention was based on the discovery of the formation of a non-sticky coating film insusceptible to transcription onto surfaces contacted thereto by incorporating a specific polysaccharide-sterol derivative. Such a superior inventive effect is verified by the Examples and Comparative Examples in the original specification. In Table 1 of the specification of the present invention, experimental results of transcription tests of coating films are given. Examples 1 to 6 give the results in which specific polysaccharide-sterol derivatives according to the present invention are used. Comparative Examples 1 to 4 give the results in which a polysaccharide-sterol derivative other than that according to the present invention is used or no polysaccharide-sterol derivative is incorporated. Namely, there are used TSP (tris-trimethylsiloxysilyl-propyl carbamate pullulan) in Comparative Example 1, pullulan in Comparative Example 2, no sterol derivative in Comparative Example 3 and polyvinyl alcohol in place of a sterol derivative in Comparative Example 4. All these compounds in the Comparative Examples correspond to the water-soluble high polymer indicated in Ishiwatari et al, wherein polyvinyl alcohol is recited therein on line 6 of column 11 as a water-soluble high polymer.


As seen in Table 1, it is clear that the effect of insusceptibility to transcription of a coating film of an emulsion composition onto surfaces contacted therewith is superior for the emulsion composition containing the specific polysaccharide-sterol derivative according to the present invention as compared with the emulsion composition in which a water-soluble high polymer of Ishiwatari et al is used. Similar results can be seen also in Table 6 of the specification of the present invention. In all the Examples and Comparative Examples (Examples 20 to 25 and Comparative Examples 9 to 12), a water-soluble high polymer used in Ishiwatari et al is employed. Here, it is seen that emulsion compositions containing the polysaccharide-sterol derivative according to the present invention (Examples 20 to 25) bring about superior results as compared with the emulsion compositions not having the polysaccharide-sterol derivative according to the present invention (Comparative Examples 9 to 12).

Sunamoto et al discloses special polysaccharide-sterol derivatives similar to those according to the present invention. Sunamoto et al neither teaches nor even suggests the combination of the special polysaccharide-sterol derivative with a volatile oil or volatile organic solvent in an emulsion composition for a cosmetic product and thereby attain the superior effects mentioned above. On the other hand, Ishiwatari et al teaches employment of a water-soluble high polymer with only a generic exemplification of "usual high polymers". Ishiwatari et al neither teaches nor even suggests the above-mentioned superior effect by incorporation of the specific polysaccharide-sterol derivative according to the present invention. Thus, there is no motivation for combining the two in order to presume the above-mentioned unexpected effect of superior insusceptibility to transcription of coating film onto surfaces contacted therewith.

The present invention brings about an unexpected superior effect of insusceptibility to transcription of an applied layer or coating film of a cosmetic product containing the specific polysaccharide-sterol derivative and volatile oil or volatile organic solvent onto surfaces contacted therewith, as clearly described in the specification of the present application. On the other hand, the cited References, i.e. Sunamoto et al and Ishiwatari et al, do not provide any motivation to be combined together for realizing these superior inventive effects attained by the present invention and, hence, the present invention possesses a clear inventive step over Sunamoto et al and Ishiwatari it al.

Reconsideration of the present application and the passing of it to issue is respectfully solicited.

Respectfully submitted,

  
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